

**Claims:**

Please amend claim 1, as follows:

1. (Amended) A pedal having:

- AS
- (a) a spindle for attachment to a crankarm, having an axis of rotation,
  - (b) a shoe supporting surface on an upper shoe facing side of said spindle, a second shoe supporting surface on a lower ground facing side of said spindle, each said shoe supporting surface being configured to at least partially surround a corresponding said clipless shoe binding on the same said side of said spindle, each said shoe supporting surface having a height defined as the perpendicular distance from said spindle axis to a first plane both parallel to said spindle axis and tangent to said shoe supporting surface at the general location of said shoe sole contact with said shoe supporting surface,
  - (c) a clipless shoe binding on an upper shoe facing side of said spindle, a second clipless shoe binding on a lower ground facing side of said spindle, said clipless shoe bindings being from the group of shoe bindings comprising a mechanism which attaches to a cleat mounted to and recessed within said shoe sole, each said binding having an uppermost surface or plurality of surfaces, each said binding having a height defined as the perpendicular distance from said spindle axis to a second plane parallel to said first plane on said corresponding same side of said spindle and tangent to said uppermost surface or plurality of surfaces of said corresponding clipless shoe binding, wherein the improvement comprises the addition of:
  - (d) a rider actuated relative height variability linkage, rotatably affixed to said spindle, connecting said shoe supporting surfaces and said clipless shoe bindings to said spindle, which provides for sufficiently varying the relative height between each said clipless shoe binding and each said corresponding shoe supporting surface on said same side of said spindle to either position and

AB5  
cont

securely hold said uppermost surface or plurality of surfaces of said clipless shoe bindings either sufficiently level with or lower than said corresponding shoe supporting surfaces to allow at least said shoe supporting surfaces to securely support said shoe sole without attachment of said sole recessed cleat with either of said clipless shoe bindings, hereby referred to as an unbound mode of operation, or to position and securely hold said clipless shoe bindings sufficiently higher than said corresponding shoe supporting surfaces to allow said sole recessed cleat to attach to said clipless shoe bindings, hereby referred to as a clipless binding mode of operation.

Please amend claim 3, as follows:

- AB6
3. (Amended) The pedal of claim 1, wherein said rider actuated relative height variability linkage either extends said clipless shoe bindings above, or retracts said clipless shoe bindings sufficiently below said corresponding shoe supporting surfaces, to allow said pedal to be used in either said clipless binding mode, or in said unbound mode, said shoe supporting surfaces being fixed in height relative to said spindle axis.

[ Please amend claim 4, as follows: ]

4. (Amended) The pedal of claim 1, wherein said relative height variability linkage either extends said shoe supporting surfaces sufficiently above, or retracts said shoe supporting surfaces sufficiently below said corresponding clipless shoe bindings, to allow said pedal to be used in either said clipless binding mode, or in said unbound mode, said clipless shoe bindings being fixed in height relative to said spindle axis of said pedal.

[ Please amend claim 5, as follows: ]

- B6  
cont
5. (Amended) The pedal of claim 1, having additionally, a mechanism for automatically changing said relative height of said clipless shoe bindings to be sufficiently level with or below said corresponding shoe supporting surfaces to allow usage of said pedal in said unbound mode, upon release of said cleat from said clipless shoe binding.

[ Please amend claim 6, as follows: ]

6. (Amended) The pedal of claim 1, wherein each said shoe supporting surface comprises a plurality of surfaces to form a single shoe supporting surface.

Please cancel claim 7. ✓

Please add claims 8-25, as follows:

- A7
8. The pedal of claim 1 wherein at least part of said clipless shoe bindings are continuous with at least part of said relative height variability linkage.
9. The pedal of claim 1 wherein said relative height variability is sufficient to allow said pedal to be operated in said unbound mode without contact of said cleat on said pedal.
10. The pedal of claim 1 wherein said relative height variability is sufficient to allow said pedal to be operated in said clipless binding mode without contact of said shoe sole on said pedal.
11. A pedal having:
- (a) a spindle for attachment to a crankarm, having an axis of rotation,

- B7  
Conf
- (b) a platform for supporting a rider's shoe, on it's sole, on an upper shoe-facing side of said spindle, said platform having a shoe supporting surface, and a second platform for supporting said rider's shoe, on an opposite lower ground-facing side of said spindle, said second platform also having a said shoe supporting surface, at least one said platform having a void for containing a binding present on the same said side of said spindle, each said platform having a height defined as the perpendicular distance from said spindle axis to a first plane parallel to said spindle axis and tangent to said shoe supporting surface at the general location of said shoe sole contact on said shoe supporting surface,
- (c) at least one binding deployable on said upper shoe-facing side of said spindle, and optionally, a second binding deployable on said opposite lower ground-facing side of said spindle, all said bindings being from the group of shoe bindings comprising a mechanism which attaches to a cleat mounted to said shoe sole, each said binding having a height defined as the perpendicular distance from said spindle axis to a second plane parallel to said first plane on said corresponding same side of said spindle and tangent to said binding, wherein the improvement comprises the addition of:
- (d) at least one linkage, actuatable by said rider, rotatably affixed to said spindle, connecting at least part of each said platform to at least part of each said corresponding binding, whereby the difference in said height between each said binding and each said corresponding platform, may be varied sufficiently to either position and hold sufficiently secure all said bindings at a said height either sufficiently level with or lower than said corresponding platforms to allow at least any said platform to securely support said shoe sole, without attachment of said cleat with any said binding, hereby referred to as an unbound mode of operation, or to position and hold sufficiently secure all said bindings at a said height sufficiently higher than said corresponding platforms to allow said cleat to attach to any said binding, hereby referred to as a clipless binding mode of operation.

- B7  
cont*
12. The pedal of claim 11, wherein said linkage or linkages, upon a single actuation by a rider, operate to both change said difference in said height of both a said upper shoe facing binding relative to a said corresponding platform on said same upper shoe facing side of said spindle, and simultaneously, to change said difference of said height of a said lower ground-facing binding relative to a said corresponding platform on said same ground-facing side of said spindle.
  13. The pedal of claim 11, wherein said linkage or linkages change said height of at least one said binding sufficiently to allow said pedal to be used in either said clipless binding mode, or in said unbound mode, said shoe supporting surfaces of said platforms being fixed in said height.
  14. The pedal of claim 11, wherein said linkage or linkages change said height of at least one said platform sufficiently to allow said pedal to be used in either said clipless binding mode, or in said unbound mode, all said bindings being fixed in said height.
  15. The pedal of claim 14, wherein at least one said shoe supporting surface comprises a plurality of surfaces to form a single shoe supporting surface.
  16. The pedal of claim 11, having additionally, a mechanism for automatically changing said difference in said height of at least one said binding relative to a said corresponding platform to allow said pedal to be used in said unbound mode, upon release of said cleat from said binding to which said cleat was attached.
  17. The pedal of claim 11, wherein at least one said shoe supporting surface comprises a plurality of surfaces to form a single shoe supporting surface.

18. The pedal of claim 11 wherein at least part of each said binding is continuous with at least part of said linkage or linkages.
19. The pedal of claim 11 wherein at least part of each said platform is continuous with at least part of each said linkage or linkages.
20. The pedal of claim 11 wherein said linkage or linkages provide sufficient said difference in said heights between said platforms and corresponding said bindings to allow pedal to be operated in said unbound mode without contact of said cleat on said binding or bindings.
21. The pedal of claim 11 wherein said said linkage or linkages provide sufficient said difference in said heights between said platforms and corresponding said bindings to allow pedal to be operated in said clipless binding mode without contact of said shoe sole on said pedal.
22. A pedal having:
- a) a spindle for attachment to a crankarm, having an axis of rotation,
  - b) at least one binding from the group of clipless shoe bindings comprising a mechanism which attaches to a cleat mounted to and recessed within a shoe sole,
  - c) a body, rotatably attached to said spindle, said body having at least one shoe supporting surface, said body having at least one void for at least partially containing all said bindings, wherein the improvement comprises the addition of:
  - d) a means for :
    - 1) attaching all said bindings to said body,
    - 2) retracting all said bindings sufficiently into all said voids of said body to allow at least all said shoe supporting surfaces to securely support said shoe sole without attachment of said cleat with either said binding, and for:

3) extending and securing all said bindings sufficiently outward from all said voids of said body to allow said cleat to attach to any said binding.

23. The pedal of claim 22, having additionally, a means for automatically retracting all said bindings into all said voids of said body to allow at least all said shoe supporting surfaces to support said shoe sole, upon release of said cleat from said binding to which said cleat was attached.

*B2 Cont*  
24. A pedal having:

- a) a spindle for attachment to a crank arm,
- b) at least one binding from the group of clipless shoe bindings comprising a mechanism which attaches to a cleat mounted and recessed within to a shoe sole,
- c) a body, rotatably attached to said spindle, said body having at least one shoe supporting surface, said body having at least one void for at least partially containing all said bindings, wherein the improvement comprises the addition of:
- d) a mechanism or plurality of mechanisms for:
  - 1) attaching all said bindings to said body,
  - 2) retracting all said bindings sufficiently into all said voids of said body to allow at least all said shoe supporting surfaces to securely support said shoe sole without attachment of said cleat with any said binding, and for:
  - 3) extending and securing all said bindings sufficiently outward from all said voids of said body to allow said cleat to attach to all said bindings.

25. The pedal of claim 24, having additionally, a means for automatically retracting all said bindings into all said voids of said body to allow at least all said shoe supporting surfaces to support said shoe sole, upon release of said cleat from said binding to which said cleat was attached.

26. The pedal of claim 24 wherein all said mechanisms provide sufficient said

retraction of all said bindings into all said voids of said body to allow said body to securely support said shoe sole on any of said shoe supporting surfaces without contact of said sole recessed cleat on said pedal.

27. The pedal of claim 24 wherein all said mechanisms provide sufficient said extension of all said bindings outward from all said voids of said body to allow any said binding to attach to said sole recessed cleat without contact of said shoe sole on said pedal.

28. The pedal of claim 24, wherein all said mechanisms operate on all said bindings simultaneously, upon a single actuation by a rider.

29. A pedal for use with a rider's shoe, said rider's shoe having an attached sole recessed cleat, having:

- a) a spindle for attachment to a crankarm, having an axis of rotation,
- b) at least one unbound shoe supporting means, rotatably attached to said spindle, having a shoe supporting surface or plurality of surfaces for supporting said rider's shoe, on said rider's shoe sole, said rider's shoe being otherwise unattached to said pedal, each said unbound shoe supporting means having a height defined as the perpendicular distance from said spindle axis to a first plane both parallel to said spindle axis and tangent to said shoe supporting surface or plurality of surfaces at the general location of said shoe sole contact with said shoe supporting surface or plurality of surfaces,
- c) at least one binding from the group of clipless shoe bindings comprising a mechanism which engages and affixes to said cleat, also rotatably attached to said spindle, each said binding being generally disposed about said spindle in a shoe sole receiving position corresponding to a said unbound shoe supporting means, and having a generally outermost outward facing surface or plurality of surfaces in any given position, each said binding having a height defined as the



perpendicular distance from said spindle axis to a second plane parallel to said first plane on said corresponding same side of said spindle and tangent to said outermost outward facing surface or plurality of surfaces of said corresponding binding, wherein the improvement comprises the addition of:

- B7  
cont
- d) at least one mechanism, actuatable by said rider, acting on either all said bindings, and/or all said unbound shoe supporting means, to provide sufficient adjustment of the difference in said height between said outermost outward facing surface or surfaces of each said binding and each said corresponding unbound shoe supporting means to either position and hold sufficiently secure said outermost outward facing surface or surfaces of all said bindings at a said height either sufficiently level with or lower than all said shoe supporting surfaces of said corresponding unbound shoe supporting means to allow at least all said corresponding unbound shoe supporting means to securely support said shoe sole, without attachment of said cleat with any said binding, hereby referred to as an unbound mode of operation, or to position and hold sufficiently secure all said bindings at a said height sufficiently higher than said shoe supporting surface or surfaces of all said corresponding unbound shoe supporting means to allow said cleat to engage and affix to any said binding, hereby referred to as a clipless binding mode of operation.

---

**Remarks:**

Preliminary Amendment A, mailed August 21, 2002, which was deemed non-compliant with the standards of 37 CFR 1.121 is hereby rescinded (abandoned) and replaced with this Preliminary Amendment B, which differs substantially from Preliminary Amendment A.

**Specification:**